

Commercial Flue Damper Electronic Ignition Gas Water Heater



Photo is of
D-75T-125-3N

FEATURING:
THE BRADFORD WHITE
ICON^{HD}
COMMERCIAL CONTROL SYSTEM



The Commercial Flue Damper Models feature:

- **ICON HD™**—Intelligent proven design combines temperature control, diagnostic codes, and system ignition functions into a single control board with a digital LCD display. Control panel cover tilts down for ease of wiring and service.
- **Operation Mode**—Two different digitally displayed operation modes have the capability of adjusting the temperature setting up to 180°F (82°C), and adjusting the degree setting (°F to °C, or °C to °F).
- **Service Mode**—Eight different digitally displayed service modes can be easily cycled through by pressing the select button. There is the capability of adjusting the temperature setting up to 180°F (82°C), adjusting the degree setting (°F to °C, or °C to °F), locking the maximum temperature setting that can be adjusted in operation mode, displaying the average water temperature (if water heater has two sensors), displaying the upper temperature sensor, displaying the lower temperature sensor, displaying the flame current of the pilot flame, and displaying diagnostic codes.
- **Electronic Ignition**—High voltage, low current electricity is sent to the pilot electrode initiating a spark to ignite the pilot gas. This results in savings of pilot gas during stand-by periods because the pilot flame only operates when there's a call for heat.
- **Automatic Flue Damper**—Reduces stand-by loss, saving gas consumption and improving overall efficiency.
- **Factory Installed Hydrojet® Sediment Reduction System**—Cold water inlet sediment reducing device helps prevent sediment build up in the tank.
- **Vitraglas® Lining**—An exclusively engineered enamel formula that provides superior tank protection from the highly corrosive effects of hot water. This formula (Vitraglas®) is fused to the steel surface by firing at a temperature of over 1600°F (871°C).
- **Insulation System**—Non-CFC foam covers the sides and top of the tank, reducing heat loss. This results in less energy consumption, improved efficiencies, and jacket rigidity.
- **Water Connections**—1½" (38mm) NPT factory-installed true dielectric fittings extend water heater life and simplify water line connections.
- **Hand Hole Cleanout**—Allows inspection of tank interior and facilitates the removal of sediment deposits.
- **E.C.O.**—An automatic reset Energy Cut Out (E.C.O.) shuts off all gas in event of an overheat condition. This automatically resets when operation conditions are back to normal.
- **Protective Magnesium Anode Rods**—Provide added protection against corrosion for long-term, trouble-free service.
- **Sanitizing Capability**—Temperature setting up to 180°F (82°C).
- **ASME Code Available on all Models Above 200,000 BTU/Hr.**
- **NSF Construction Available.**
- **Low NOx Construction Available.**
- **North Carolina Code Compliant.**
- **T&P Relief Valve**—Installed.
- **Low Restrictive Brass Drain Valve**—Durable tamper proof design.
- **Design certified by CSA International.**

3 or 5-Year Limited Tank Warranties / 1-Year Limited Warranty on Component Parts.

For more information on warranty, please visit www.bradfordwhite.com

For products installed in USA, Canada, and Puerto Rico. Some states do not allow limitations on warranties. See complete copy of the warranty included with the heater.

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,682,666; 7,634,976; 5,660,165; 5,954,492; 6,056,542; 6,935,280; 5,372,185; 5,485,879; 5,574,822; 7,971,560; 7,992,526; 6,684,821; 7,334,419; 7,866,168; 7,270,087; 7,007,748; 5,596,952; 6,142,216; 7,699,026; 5,341,770; 7,337,517; 7,665,211; 7,665,210; 7,063,132; 7,063,133; 7,559,293; 7,900,589; 5,943,984; 8,082,888; 5,988,117; 7,621,238; 7,650,859; 5,761,379; 7,409,925; 5,277,171; 8,146,772; 7,458,341; 2,262,174. OTHER U.S. AND FOREIGN PATENT APPLICATIONS PENDING. CURRENT CANADIAN PATENTS: 2,314,845; 2,504,824; 2,108,186; 2,143,031; 2,409,271; 2,548,958; 2,112,515; 2,476,685; 2,239,007; 2,092,105; 2,107,012. Vitraglas® and Hydrojet® are registered trademarks of Bradford White® Corporation.

Commercial Flue Damper Electronic Ignition Gas Water Heater

Electronic Ignition Models

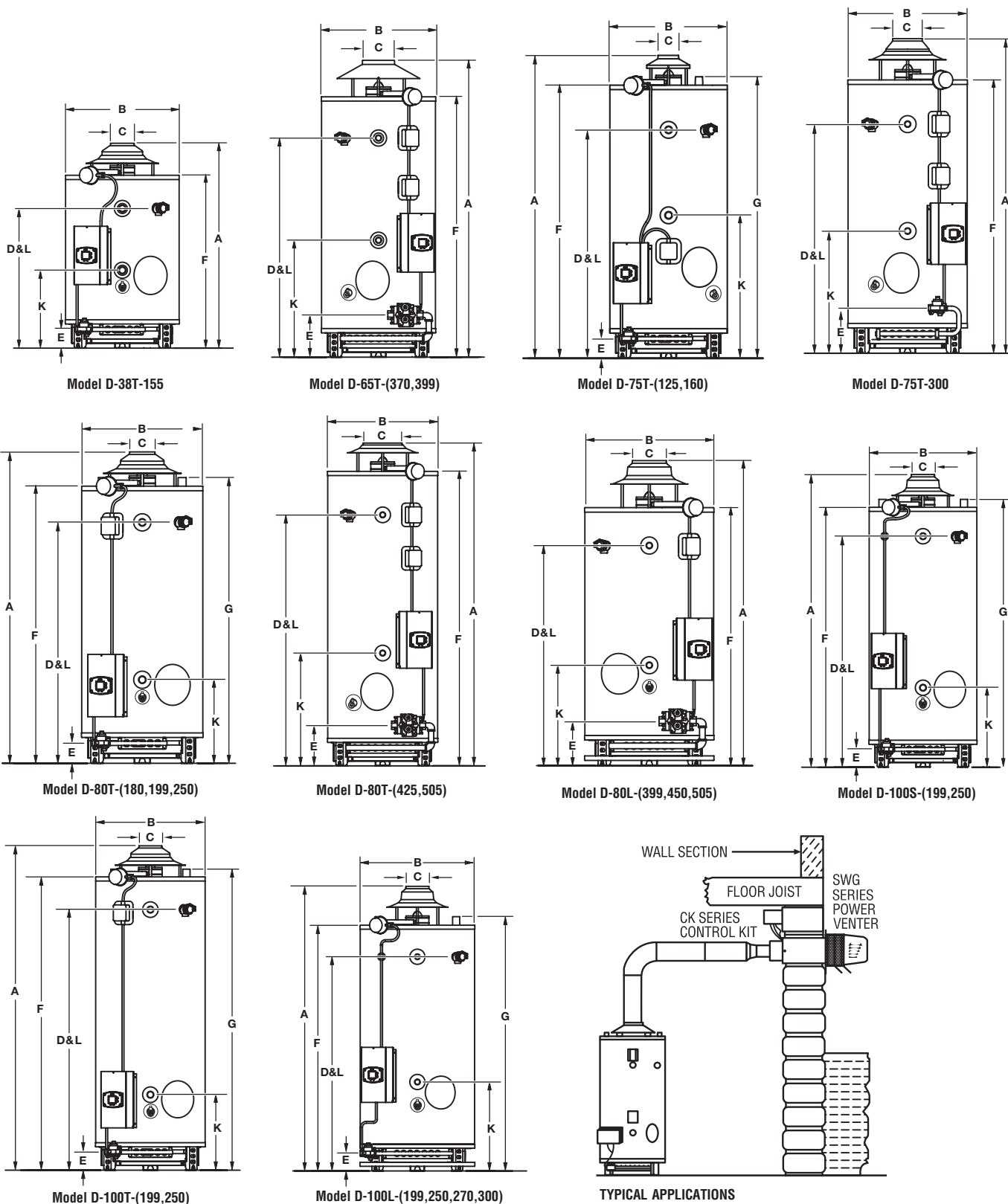
NATURAL GAS AND LIQUID PROPANE GAS

Meet or exceed ASHRAE 90.1b (current standard) C.E.C. Listed

Model Number	Nominal Gal. Capacity		BTU/Hr. Input	LP BTU/Hr. Input	GPH Recovery at Degree Rise*			A Floor to Vent Conn. in.	B Jacket Dia. in.	C Vent Size in.	D Floor to T&P Conn. in.	E Floor to Gas Conn. in.	F Floor to Top of Heater in.	G Floor to Top Water Conn. in.	K Floor to Water Conn. Cold in.	L Floor to Water Conn. Hot in.	Depth in.	C/L of Water Conn. in.	Water Conn. NPT in.	Gas Conn. Size in.	Approx. Shipping Weight (lbs.)	
	U.S. Gal.	Imp. Gal.			40°F	100°F	140°F														Std.	ASME
D-38T-155-3N+	38	31	155,000	155,000	376	150	107	55 ¹ / ₈	28 ¹ / ₄	6	38 ³ / ₄	8 ¹¹ / ₁₆	47 ¹ / ₁₆	—	23 ⁵ / ₁₆	38 ³ / ₄	32 ¹ / ₂	—	1 ¹ / ₂ (F)	³ / ₄	438	—
D-65T-370-3N(A)	65	54	370,000	370,000	897	359	256	77 ⁵ / ₁₆	28 ¹ / ₄	8	58 ¹ / ₈	6 ¹ / ₄	68 ⁵ / ₁₆	—	32 ⁷ / ₈	58 ¹ / ₈	33 ³ / ₈	—	1 ¹ / ₂ (F)	¹ / ₂ (N)	665	720
D-65T-399-3N(A)**	65	54	399,999	—	970	388	277	77 ⁵ / ₁₆	28 ¹ / ₄	8	58 ¹ / ₈	6 ¹ / ₄	68 ⁵ / ₁₆	—	32 ⁷ / ₈	58 ¹ / ₈	33 ³ / ₈	—	1 ¹ / ₂ (F)	1(N)	665	720
D-75T-125-3N	75	62	125,000	125,000	303	121	86	76 ³ / ₁₆	28 ¹ / ₄	5	58 ⁵ / ₁₆	8 ¹¹ / ₁₆	69 ¹ / ₁₆	70	37 ¹⁵ / ₁₆	58 ⁵ / ₁₆	32 ¹ / ₂	14 ¹ / ₂	1 ¹ / ₂ (T&F)	³ / ₄	520	—
D-75T-160-3N	75	62	160,000	155,000	389	155	111	76 ³ / ₁₆	28 ¹ / ₄	6	58 ⁵ / ₁₆	8 ¹¹ / ₁₆	69 ¹ / ₁₆	70	37 ¹⁵ / ₁₆	58 ⁵ / ₁₆	32 ³ / ₈	14 ¹ / ₂	1 ¹ / ₂ (T&F)	³ / ₄	520	—
D-75T-300-3N(A)	75	62	300,000	300,000	727	291	208	79 ⁷ / ₁₆	28 ¹ / ₄	7	58 ¹ / ₈	8 ¹¹ / ₁₆	69 ¹⁵ / ₁₆	—	32 ⁷ / ₈	58 ¹ / ₈	33 ³ / ₈	—	1 ¹ / ₂ (F)	³ / ₄	590	645
D-80T-180-3N	80	67	180,000	180,000	436	175	124	76 ³ / ₁₆	28 ¹ / ₄	6	59 ¹⁵ / ₁₆	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	70	23 ¹ / ₂	59 ¹⁵ / ₁₆	32 ¹ / ₂	19	1 ¹ / ₂ (T&F)	³ / ₄	540	—
D-80T-199-3N	80	67	199,999	199,999	485	194	139	76 ³ / ₁₆	28 ¹ / ₄	6	59 ¹⁵ / ₁₆	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	70	23 ¹ / ₂	59 ¹⁵ / ₁₆	32 ¹ / ₂	19	1 ¹ / ₂ (T&F)	³ / ₄	540	—
D-80T-250-3N(A)	80	67	250,000	235,000	606	242	173	76 ³ / ₁₆	28 ¹ / ₄	6	59 ¹⁵ / ₁₆	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	70	23 ¹ / ₂	59 ¹⁵ / ₁₆	32 ¹ / ₂	19	1 ¹ / ₂ (T&F)	³ / ₄	540	590
D-80L-399-3N(A)	80	67	399,999	375,000	970	388	277	73 ¹ / ₄	30 ¹ / ₄	8	55 ⁵ / ₈	7	64 ¹ / ₄	—	27 ¹ / ₂	55 ⁵ / ₈	34 ¹ / ₂	—	1 ¹ / ₂ (F)	¹ / ₂ (N)	800	835
D-80T-425-3N(A)	80	67	425,000	425,000	1030	412	294	88 ⁵ / ₁₆	28 ¹ / ₄	10	68 ³ / ₁₆	6 ¹ / ₄	79 ⁵ / ₁₆	—	32 ⁷ / ₈	68 ³ / ₁₆	34 ¹ / ₂	—	1 ¹ / ₂ (F)	¹ / ₂ (N)	750	800
D-80L-450-3N(A)	80	67	450,000	425,000	1091	436	312	73 ¹ / ₄	30 ¹ / ₄	10	55 ⁵ / ₈	7	64 ¹ / ₄	—	27 ¹ / ₂	55 ⁵ / ₈	35 ¹ / ₂	—	1 ¹ / ₂ (F)	¹ / ₂ (N)	800	835
D-80L-505-3N(A)	80	67	505,000	475,000	1224	489	350	73 ¹ / ₄	30 ¹ / ₄	10	55 ⁵ / ₈	7	64 ¹ / ₄	—	27 ¹ / ₂	55 ⁵ / ₈	35 ¹ / ₂	—	1 ¹ / ₂ (F)	¹ / ₂ (N)	800	835
D-80T-505-3N(A)	80	67	505,000	505,000	1178	489	337	88 ⁵ / ₁₆	28 ¹ / ₄	10	68 ³ / ₁₆	6 ¹ / ₄	79 ⁵ / ₁₆	—	32 ⁷ / ₈	68 ³ / ₁₆	34 ¹ / ₂	—	1 ¹ / ₂ (F)	¹ / ₂ (N)	750	800
D-100L-199-3N	100	83	199,999	199,999	485	194	139	77 ¹⁵ / ₁₆	30 ¹ / ₄	6	60 ³ / ₈	8 ¹¹ / ₁₆	68 ¹⁵ / ₁₆	70 ¹ / ₂	27 ³ / ₈	60 ³ / ₈	34 ¹ / ₂	23	1 ¹ / ₂ (T&F)	³ / ₄	725	—
D-100S-199-3N	100	83	199,999	199,999	485	194	139	75 ¹ / ₂	28 ¹ / ₄	6	64 ³ / ₈	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	81	24 ³ / ₄	64 ³ / ₈	32 ¹ / ₂	21	1 ¹ / ₂ (T&F)	³ / ₄	667	—
D-100T-199-3N	98	82	199,999	199,999	485	194	139	88 ¹⁵ / ₁₆	28 ¹ / ₄	6	70 ¹⁵ / ₁₆	8 ¹¹ / ₁₆	79 ⁵ / ₁₆	81 ¹ / ₂	23 ¹ / ₂	70 ¹⁵ / ₁₆	32 ¹ / ₂	19	1 ¹ / ₂ (T&F)	³ / ₄	610	—
D-100L-250-3N(A)	100	83	250,000	250,000	606	242	173	77 ¹⁵ / ₁₆	30 ¹ / ₄	6	60 ³ / ₈	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	70 ¹ / ₂	27 ³ / ₈	60 ³ / ₈	34 ¹ / ₂	23	1 ¹ / ₂ (T&F)	³ / ₄	725	765
D-100S-250-3N(A)	100	83	250,000	250,000	606	242	173	75 ¹ / ₂	28 ¹ / ₄	6	64 ³ / ₈	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	81	24 ³ / ₄	64 ³ / ₈	32 ¹ / ₂	21	1 ¹ / ₂ (T&F)	³ / ₄	667	702
D-100T-250-3N(A)	98	82	250,000	235,000	606	242	173	88 ¹⁵ / ₁₆	28 ¹ / ₄	6	70 ¹⁵ / ₁₆	8 ¹¹ / ₁₆	79 ⁵ / ₁₆	81 ¹ / ₂	23 ¹ / ₂	70 ¹⁵ / ₁₆	32 ¹ / ₂	19	1 ¹ / ₂ (T&F)	³ / ₄	610	690
D-100L-270-3N(A)**	100	83	270,000	—	655	262	187	77 ¹⁵ / ₁₆	30 ¹ / ₄	6	60 ³ / ₈	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	70	27 ³ / ₈	60 ³ / ₈	34 ¹ / ₂	23	1 ¹ / ₂ (T&F)	³ / ₄	725	765
D-100L-300-3N(A)	100	83	300,000	300,000	727	291	208	77 ¹⁵ / ₁₆	30 ¹ / ₄	7	60 ³ / ₈	8 ¹¹ / ₁₆	68 ⁵ / ₁₆	70	27 ³ / ₈	60 ³ / ₈	34 ¹ / ₂	23	1 ¹ / ₂ (T&F)	³ / ₄	725	765

Model Number	Nominal Liter Capacity	kW Input	LP kW Input	LPH Recovery at Degree Rise*			A Floor to Vent Conn. mm.	B Jacket Dia. mm.	C Vent Size mm.	D Floor to T&P Conn. mm.	E Floor to Gas Conn. mm.	F Floor to Top of Heater mm.	G Floor to Top Water Conn. mm.	K Floor to Water Conn. Cold mm.	L Floor to Water Conn. Hot mm.	Depth mm.	C/L of Water Conn. mm.	Water Conn. NPT mm.	Gas Conn. Size mm.	Approx. Shipping Weight (kg.)	
				22°C	56°C	78°C														Std.	ASME
D-38T-155-3N+	144	45.4	45.4	1391	556	397	1400	718	152	984	221	1195	—	592	984	826	—	38 (F)	19	199	—
D-65T-370-3N(A)	246	108.4	108.4	3395	1359	969	1964	718	203	1476	159	1760	—	962	1476	845	—	38 (F)	²⁵ / ₁₆ IN LP	302	327
D-65T-399-3N(A)**	246	117.2	—	3671	1469	1048	1964	718	203	1476	159	1760	—	962	1476	845	—	38 (F)	25	302	327
D-75T-125-3N	284	36.6	36.6	1147	458	326	1935	718	127	1481	221	1754	1778	964	1481	826	368	38 (T&F)	19	236	—
D-75T-160-3N	284	46.8	45.4	1431	572	409	1935	718	152	1481	221	1754	1778	964	1481	822	368	38 (T&F)	19	236	—
D-75T-300-3N(A)	284	87.9	87.9	2752	1101	787	2018	718	178	1476	221	1773	—	962	1476	845	—	38 (F)	19	268	393
D-80T-180-3N	303	52.7	52.7	1650	662	469	1940	718	152	1522	221	1735	1778	597	1522	826	483	38 (T&F)	19	245	—
D-80T-199-3N	303	58.6	58.6	1836	734	526	1940	718	152	1522	221	1735	1778	597	1522	826	483	38 (T&F)	19	245	—
D-80T-250-3N(A)	303	73.2	68.9	2294	916	655	1940	718	152	1522	221	1735	1778	597	1522	826	483	38 (T&F)	19	245	268
D-80L-399-3N(A)	303	117.2	109.9	3671	1469	1048	1861	768	203	1413	178	1632	—	699	1413	876	—	38 (F)	²⁵ / ₁₆ IN LP	363	379
D-80T-425-3N(A)	303	124.5	124.5	3899	1559	1113	2243	718	254	1732	159	2015	—	962	1732	876	—	38 (F)	²⁵ / ₁₆ IN LP	340	363
D-80L-450-3N(A)	303	131.8	124.6	4129	1650	1181	1861	768	254	1413	178	1632	—	699	1413	902	—	38 (F)	²⁵ / ₁₆ IN LP	363	379
D-80L-505-3N(A)	303	148.0	139.2	4633	1851	1325	1861	768	254	1413	178	1632	—	699	1413	902	—	38 (F)	²⁵ / ₁₆ IN LP	363	379
D-80T-505-3N(A)	303	148.0	148.0	4459	1783	1276	2243	718	254	1732	159	2015	—	962	1732	876	—	38 (F)	²⁵ / ₁₆ IN LP	340	363
D-100L-199-3N	379	58.6	58.6	1836	734	526	1980	768	152	1535	221	1751	1791	695	1534	876	584	38 (T&F)	19	329	—
D-100S-199-3N	379	58.6	58.6	1836	734	526	1918	718	152	1635	221	1735	2057	629	1635	826	533	38 (T&F)	19	302	—
D-100T-199-3N	371	58.6	58.6	1836	734	526	2259	718	152	1802	221	2015	2070	597	1802	826	483	38 (T&F)	19	277	—
D-100L-250-3N(A)	379	73.2	73.2	2294	916	655	1980	768	152	1535	221	1735	1791	695	1534	876	584	38 (F)	19	329	347
D-100S-250-3N(A)	379	73.2	73.2	2294	916	655	1918	718	152	1635	221	1735	2057	629	1635	826	533	38 (T&F)	19	302	318
D-100T-250-3N(A)	371	73.2	68.9	2294	916	655	2259	718	152	1802	221	2015	2070	597	1802	826	483	38 (T&F)	19	277	313
D-100L-270-3N(A)**	379	79.0	—	2479	992	708	1980	768	152	1535	221	1735	1778	695	1534	876	584	38 (F)	19	329	347
D-100L-300-3N(A)	379	87.9	87.9	2752	1101	787	1980	768	178	1535	221	1735	1778	695	1534	876	584	38 (F)	19	329	347

Commercial Flue Damper Electronic Ignition Gas Water Heater



Optional Equipment Features:

Optional Honeywell EnviraCOM™ Alarm Module—

Provides indication (contacts are closed) when an alarm is present via normally open contacts (rated for up to 24 VAC).

Kit Number – 265-51961-00.

Optional Power Vent Kits – available for inputs from 125,000 to 505,000 BTU/Hr.

BTU Input Range

125,000 to 290,000 BTU/Hr.:

300,000 to 399,999 BTU/Hr.:

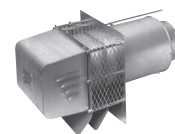
425,000 to 505,000 BTU/Hr.:

Kit Number

239-81764-00

239-81766-00

239-82148-00



Commercial Flue Damper Electronic Ignition Gas Water Heater

Sample Specification

The water heater shall be a Bradford White model with a rated storage capacity of not less than _____ gallons (_____ liters), a minimum gas input of _____ BTU/Hr. (_____ kW), a minimum recovery of _____ GPH (_____ LPH). The tank shall be Vitraglas® lined and have a bolted hand hole cleanout. A digital LCD display shall be integrated into the front control box, and the control shall be an adjustable electronic thermostat to any temperature up to 180°F (85°C) must have an automatic re-set Energy Cut-off (E.C.O.), which shuts off all gas in an event of a overheat condition. The tank shall have _____ magnesium anode rods installed in separate tank head couplings. The heater shall have Non-CFC foam insulation, electronic ignition, and come equipped with an ASME rated T&P relief valve, a cold water inlet Hydrojet® Sediment Reduction System, and a automatic flue damper (115V AC required). It shall be design certified by CSA International for 180°F (82°C) application, either with or without a separate storage tank, and comply with state and local codes and ordinances.

General

All gas water heaters are certified at 300 PSI test pressure (2068 kPa) and 150 PSI working pressure (1034 kPa). All models are design certified by CSA International (formerly AGA/CGA), ANSI standard Z21.10.3, for up to 180°F (82°C) application as an Automatic Storage Heater, and an Automatic Circulating Tank Heater. As an Automatic Storage Heater, all models are complete, self-contained water heating systems. It needs no separate storage tank, pump, wiring or elaborate piping network. When equipped with a mixing valve, it will supply 180°F (82°C) sanitizing and lower temperature general purpose hot water simultaneously. These models can be used either as a single unit or in multiples connected in series or parallel (recommended).

Dimensions and specifications subject to change without notice in accordance with our policy of continuous product improvement.

— BRADFORD WHITE IS —



For field service, contact your professional installer or local Bradford White sales representative.

Sales 800-523-2931 ■ Fax 215-641-1612

Technical Support 800-334-3393 ■ Email techserv@bradfordwhite.com

Warranty 800-531-2111 ■ Email warranty@bradfordwhite.com

International: Telephone 1-215-641-9400 ■ Email international@bradfordwhite.com / www.bradfordwhite.com

Built to be the Best™